

*BEST COPY*  
*Available*  
*THROUGHOUT*  
*FOLDER*

6/24/98

C-123B (EXT. DEOPS OFF - PULONS CN)

MAX GROSS WT 56,100 #

BASIC WT 32,500 #

PAYLOAD 23,600 #

CRUISE SEA LEVEL AT 5,000 FEET

0.165 NAMPP.

FUEL REQUIRED FOR 500 N.M.A. 3030 #

" " " 1 HR RES 820 #

TOTAL FUEL REQ 3,850 #

PAYLOAD 23,600 #

FUEL 3,150 #

CARGO 19,750 #

DOCUMENT NO. /

NO CHANGE IN CLASS. ☐

☐ DECLASSIFIED

CLASS. CHANGED TO: TS 2011

NEXT REVIEW DATE:

AUTH: HR 70.2

DATE 30/08/81 REVIEWER 010956

TAKEOFF WT 56,100 #

LANDING WT 53,070 # (CR FUEL ONLY USED)

CG FWD OF 26% CG 26% OF WT

T.O. MAX WET POWER S.L. 2,050' 1,450'

FLAPS - LANDING  
BRACES / REV THRUST

FLAPS LANDING  
BRACES ONLY

FLAPS FULL DOWN  
BRACES / REV THRUST

LANDING SL 1,300'

1,520'

1,010'

1649 #2  
4

15,000'  
DZ 0:30

1010

350

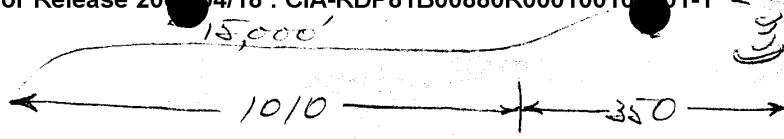
|  |  |         | DISTANCE | TIME | FUEL     | GR WT.  |
|--|--|---------|----------|------|----------|---------|
|  |  |         | —        | —    | (38,738) | 146,000 |
|  |  |         | —        | —    | 1,000    | 145,000 |
|  |  | CLIMB   | 96       | 0:30 | 2,000    | 142,400 |
|  |  | 5,000   | 714      | 3:38 | 9,790    | 132,610 |
|  |  | CLIMB   | 106      | 0:27 | 2,300    | 130,310 |
|  |  | 25,000  | 244      | 0:56 | 3,300    | 127,010 |
|  |  | DESCENT | 0        | 0:25 | 300      | 126,410 |
|  |  | 5,000   | 0        | 0:30 | 1,410    | 125,000 |
|  |  | CLIMB   | 0        | 0:22 | 2,100    | 122,900 |
|  |  | 25,000  | 350      | 1:20 | 3,650    | 119,250 |
|  |  | DESCENT | 72       | 0:20 | 895      | 118,355 |
|  |  | 15,000  | 918      | 4:00 | 8,515    | 109,840 |
|  |  | 10,000  | —        | 1:15 | 2,224    | 107,616 |

(354# UNUSABLE)

2 1

0201  
AUTH. HR 10  
DATE 30/08/1  
VIEWER 010356

1649



Basic Wt 55,262

CARGO 22,000

FUEL Wt 107,262

FUEL 38,738 → (38,384 usable)

Simultaneous 146,000

TAXI T.O. etc 1,000

145,000

C to 15K 96 miles 2600# fuel 0:30 min  
145,000  
2600

AVE TAS 192

142,400# at start of cruise

@ 15K 714 miles → .092 NAMPP for 4,000# 197EAS

368  
546 miles → .094 NAMPP for 4,000# 199EAS

376  
170  
170 → .095 NAMPP for 1,790# 202EAS

714 miles 9,790#  
142,400  
9,790

AVE TAS 251  
3.64 hrs  
(3,388)

132,610# at end of cruise at 15,000'

C to 15K 106 miles 2,300# fuel 0:27 min  
132,610  
2,300

AVE TAS 276

130,310# at start of cruise

C to 15K 244 miles → .074 NAMPP for 3,300# 178EAS

244  
0  
130,310  
3,300

H.B. 24400 RPM AL. TAS 264  
178EAS  
17.4 hrs (0:56)

127,010# at end of cruise at 22,000'

C to 15K 244 miles 600# fuel 1:25 min (data unavailable - DC 7C)

LOITER IN DZ 0:30 minutes .10 NAMPP 192EAS 2270 RPM 141 miles 1410# fuel

127,010  
2,010

600  
2,010

125,000# at end of loiter in DZ

7549

(2)

11625K 74 miles (range zero) 2100# fuel 122 min 256 TAS

122900# at start of cruise at 25,000'

Cr @ 25K 350 miles → .076 NAMPP for 1,500# 183EAS } AVE TAS  
 1144 ← 183EAS } 264  
 236 ← .11 NAMPP for 2,150# 174EAS }  
 236 ← 3,650# 1.32 shrs (1120)  
 122,900  
 3,650

119,250# at end of cruise at 25,000'

Cr to 15K 92 miles 0:20 min 895# (no data avail - miss) (same as 25-20)  
 119,250  
 895

118355# at start of cruise at 15,000'

Cr @ 15K 918 miles → .107 NAMPP for 4,955# 183EAS } AVE TAS  
 530 ← 183EAS } 279  
 388 miles → .109 NAMPP for 3,560# 183EAS }  
 388 ← 8,515# fuel 4.0 hrs (4:00 hrs)  
 118,355  
 8,515

109840# over high cone

OVER HIGH CONE  
 FUEL REMAINING  
 109,840  
 109,262  
 2578  
 354

2,224# usable fuel remaining

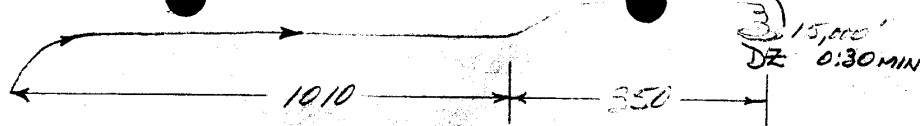
| TIME       |       |
|------------|-------|
| climb      | 0:30  |
| cr @ 15    | 3:38  |
| cr @ 15.25 | 0:27  |
| cr @ 15    | 0:56  |
| cr @ 15    | 0:25  |
| cr @ 15    | 0:30  |
| cr @ 15    | 0:22  |
| cr @ 15    | 1:20  |
| cr @ 15    | 0:20  |
| cr @ 15    | 4:00  |
| Hold       | 1:15  |
|            | 9:283 |
| TOTAL      | 13:43 |

.115 NAMPP 175EAS 1760RPM 10,000ft 1770#/hr

1.256 hrs fuel reserve

1:15 hrs fuel reserve

7649



BASIC WT 85,262  
 GROSS 22,000  
 ZERO FUEL WT 107,262  
 FUEL 52,738 → 52,384<sup>354</sup> (usable)  
 160,000

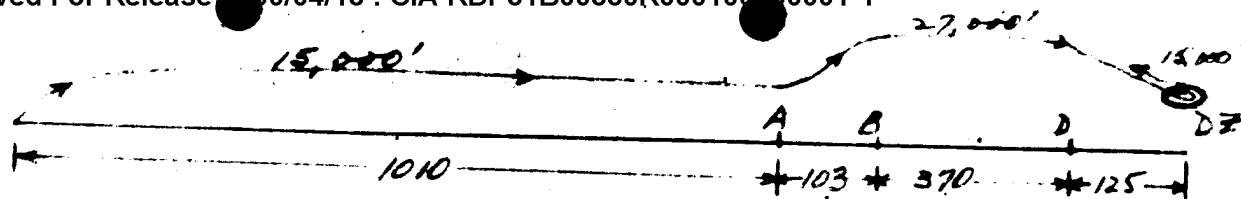
By loading with 48,738# fuel (48,384# usable)  
 STARTING 156,000#  
 TAXI etc 1,000  
 Start Climb 155,000#  
 to 15K 125 miles 3100# fuel 38 minutes 199  
 155,000  
 3,100

End Climb 151,900 start of cruise @ 15,000'  
 Cr 15K 885 miles .065 NAM/# for 3,900# 2400 RPM 185  
 253  
 151,900  
 3,900  
 148,000  
 148,000  
 3,500  
 144,500  
 276 miles to go .089 for 4,000# 2400 RPM 180  
 356  
 276 miles to go .092 NAM/# for 3,000# 2400 192  
 276  
 0  
 10,900

can't climb to 25000'  
 try w/ 10,000# less fuel at engine start  
 (38,738# at engine start  
 146,000 " " "  
 145,000 " T.O. gear up)

| Altitude | Distance | Time | Gr Wt                 |
|----------|----------|------|-----------------------|
| 107,200  | —        | —    | 139,253               |
| 139,253  | —        | —    | 138,653               |
| 138,653  | —        | —    | 135,273               |
| 135,273  | —        | —    | 125,173               |
| 125,173  | —        | —    | 120,672               |
| 120,672  | —        | —    | 119,302               |
| 119,302  | —        | —    | 118,702               |
| 118,702  | —        | —    | 117,342               |
| 117,342  | —        | —    | 114,602               |
| 114,602  | —        | —    | 111,332               |
| 111,332  | —        | —    | 110,438               |
| 110,438  | —        | —    | 101,058               |
| 101,058  | —        | —    | 98,068                |
| 98,068   | —        | —    | 41,495                |
| 41,495   | —        | —    | (full fuel = 42,517#) |
| 76,068   | —        | —    | 75,040                |
| 75,040   | —        | —    | 1,022 (33 min)        |
| 1,022    | —        | —    | 12:03                 |
| 12:03    | —        | —    | 11:30                 |
| 11:30    | —        | —    | 13:33                 |

#1  
DC 7C



|                | TAS KTS | ALTITUDE | DISTANCE | TIME  | FUEL                  | GR WT.  |
|----------------|---------|----------|----------|-------|-----------------------|---------|
| START          | —       | —        | —        | —     | —                     | 117,740 |
| CLIMB          | —       | —        | —        | —     | 310                   | 117,430 |
| CLIMB          | —       | SL       | —        | —     | 600                   | 116,830 |
| CLIMB          | 257     | CLIMB    | 83       | 0:24  | 2,370                 | 114,460 |
| CLIMB          | 258     | 15,000   | 927      | 3:28  | 9,700                 | 104,760 |
| CLIMB          | 216     | CLIMB    | 76       | 1:21  | 1,920                 | 102,840 |
| CLIMB          | 258     | 27,000   | 27       | 1:06  | 326                   | 102,514 |
| CLIMB          | 276     | 27,000   | 370      | 1:20  | 3,270                 | 99,244  |
| DESCENT        | 290     | DESCENT  | 125      | 1:26  | 1,190                 | 98,054  |
| DESCENT        | 279     | 15,000   | —        | 1:30  | 1,400                 | 96,654  |
| CLIMB          | 216     | CLIMB    | 61       | 1:17  | 1,620                 | 95,034  |
| CLIMB          | 283     | 27,000   | 64       | 1:20  | 774                   | 94,260  |
| CLIMB          | 283     | 27,000   | 370      | 1:19  | 3,190                 | 91,070  |
| DESCENT        | 294     | DESCENT  | 103      | 1:21  | 966                   | 90,104  |
| CLIMB          | 281     | 15,000   | 1010     | 3:35  | 10,100                | 79,986  |
| CLIMB          | —       | —        | —        | 1:30  | 2,940                 | 77,046  |
|                |         |          |          |       | 40,696                |         |
|                |         |          |          |       | (full fuel = 42,517#) | 75,046  |
|                |         |          |          |       |                       | 75,046  |
|                |         |          |          | 12:27 |                       |         |
|                |         |          |          | 1:30  |                       |         |
|                |         |          |          | 13:57 |                       |         |
| MAX TO. WEIGHT | 143,000 |          |          |       |                       |         |
| MAX LANDING WT | 109,000 |          |          |       |                       |         |



mission  
profileDC-7C

Use 310<sup>#</sup> fuel for start, warm-up, taxi, run-up. This can  
be over T.O. for 10<sup>th</sup>

Use 600<sup>#</sup> fuel for T.O., acceleration, and leaning after  
climb

Use 150<sup>#</sup> fuel for leaning after any subsequent climb

Use 50<sup>#</sup> fuel/hr for heaters

Use 1960<sup>#</sup>/hr fuel for holding pattern at 8,000'

4  
DOCUMENT NO. \_\_\_\_\_  
NO CHANGE IN CLASS. ID \_\_\_\_\_  
IT DECLASSIFIED \_\_\_\_\_  
CLASS. CHANGED TO: TS SC 2011  
NEXT REVIEW DATE: \_\_\_\_\_  
AUTH: HR 70-2  
DATE: 30/10/81 REVIEWER: 010956

DC7C

|    | 115,000<br>111,000 | 111<br>107,000 | 107<br>103,000 | 103<br>99,000 | 99<br>95,000 | 95<br>91,000 |
|----|--------------------|----------------|----------------|---------------|--------------|--------------|
| 27 | 270                | 277            | 283            | (1) (276)     | (281)        | (285)        |
| 26 | 269                | 275            | 281            | (1) (273)     | (279)        | (283)        |
| 25 | 268                | 273            | 279 (265)      | (270)         | (276)        | (280)        |
| 24 | 280                | 286            | 290            | 294           | 297          | 300          |
| 23 | 279                | 284            | 288            | 292           | 295          | 298          |
| 22 | 277                | 282            | 286            | 289           | 292          | 295          |

1600 BHP/ENG  
1500 BHP/ENG  
1400 BHP/ENG

DC-7C

Basic wt 75,046

Cargo 22,000

Zero fuel 97,046

Fuel 42,517

T.O. 139,563

DOCUMENT NO. 5

NO CHANGE IN CLASS. ☐

☐ DECLASSIFIED

CLASS. CHANGED TO: TS (S) C 2011

NEXT REVIEW DATE:

AUTH: HR 70-2

DATE 30081

REVIEWER: 010056

T.O. acc, lean 600#

139,563

Climb to 15,000 110 miles

3,980

134 min 3380# 197 TAS

135,583

Cr@15K 258TAS 2880#/hr 900 miles

3.49 hrs 10,100# fuel

135,583

3.29

10,100

125,483

Climb to 25 85 7260  
27 2760  
58 min 4500# fuel 216 TAS

125,483

4,500

120,983

209 miles

Cr@25K 275TAS 2680#/hr 141 miles

1.513 hrs 1370# fuel

120,983

1,370

119,613

Des to 15K 125 min 600# (Zero) miles

119,613

600

119,013

Loiter in DZ 130 min 260TAS 2720#/hr

(Zero) miles 1360#

119,013

1,360

117,653

Climb to 25K 58 5130  
24 2380  
54 min 2740# fuel

117,653

2,740

114,913

Cr to "A" 285 TAS 2680#/hr 350 miles  
 1:23 hrs 3270# fuel  
 1114

|              |
|--------------|
| 114,933      |
| <u>3,270</u> |
| 111,643      |

Down to 15K : 20 min 279 TAS 2680#/hr  
 92 miles 895 #

|            |
|------------|
| 111,643    |
| <u>895</u> |
| 110,748    |

Cr at 15K 267 TAS 2720#/hr 918 miles  
 3:46 hrs 9,430#  
 3128

|              |
|--------------|
| 110,748      |
| <u>9,430</u> |
| 101,318      |

Hold at 8K 1:30 2940#

|             |
|-------------|
| 101,318     |
| <u>2940</u> |
| 98,378      |

98 378  
 310  
98688 ✓

98068  
 97046  
1022

DC-7C

|           |                      |                   |
|-----------|----------------------|-------------------|
| BASIC WT  | 75,046               | 75,046            |
| CARGO     | 2,000                | 2,000             |
| FUEL      | 42,517 (FROM JANE'S) | FUEL WT = 77,046# |
| T.O. GRWT | 119,563 - MAXIMUM    | RES 2,940         |

1/2 hr Res holding at 8,000' - 1960#/hr  
2,940#

H1 CONE 79,986# at start of holding

Cr @ 15,000' 283 TAS 2800#/hr 1010 miles (good to 87,000#)  
3.57 hrs 10,000#  
281 TAS 2800#/hr 1010 miles (good to 91,000#)  
3.59 hrs 10,100# fuel r.k.

DOCUMENT NO. 6  
NO CHANGE IN CLASS. ☐  
☐ DECLASSIFIED  
CLASS. CHANGED TO: TS ☒ 2011  
NEXT REVIEW DATE:  
AUTH: H3170-2  
DATE: 3/16/81 REVIEWER: 010958

79,986

10,100

→ 90,086# at start of cruise at 15,000'

Descent 14,000'  
15,000'

Using 20,000' as average cruise

294 TAS 2760#/hr 103 miles

0.35 hrs 966#

90,086

966

→ 91,050# at start of descent to 15,000'

Cr @ 27,000' 283 TAS 2440#/hr 370 miles (good to 99,000#)

1.31 hrs 3,190#

91,050#

→ 94,240# at start of cruise at 27,000'

②

<sup>27,000'</sup>  
 Climb 15,000'  $\frac{34}{17}$  min  $\frac{3210}{1840}$  #fuel TAS = 216 125 miles  
 .595 hrs (36 min) : 19 min of cruise at 2440 #/hr  
 .3165 hrs 2440 #/hr = 774 # fuel  
 94,240  
 1,470 for climb  
 150 for leaving after climb  
 774 for cruise at 27,000'  
 → 96,634 # at start of climb

After 30 min at 15K' 223 IAS 279 TAS 2800 #/hr  
 0.50 hrs 1400 #  
 96,634  
 1,400  
 → 98,034 # at start of loiter in DZ

<sup>27,000'</sup>  
 Descent 15,000' Using 20,000' as average cruise  
 290 TAS 2760 #/hr 125 miles  
 .431 hrs 1190 #  
 98,034  
 1,190  
 → 99,224 # at start of descent to 15,000'

Cr @ 27,000' 276 TAS 2440 #/hr 370 miles  
 1.34 hrs 3270 #  
 99,224  
 3,270  
 → 102,494 # at start of cruise at 27,000'

<sup>27000</sup>  
 Climb 15000 <sup>40</sup>  
<sup>19</sup> 21 min <sup>3650</sup>  
<sup>1980</sup> 1770 # fuel TAS 216 103 miles  
 .486 hrs (29 min) ∴ 8 min cr at 2440 #/hr  
 .133 hrs 2440 #/hr = 326 # fuel  
 102,494

1,770 for climb  
 150 for leaning out  
 326 for cruise at 27,000'  
 → 104,740 # at start of climb

Cruise @ 15,000 268 TAS 2800 #/hr 927 miles  
 3.46 hrs 9700 #  
 104,740  
 9,700  
 → 114,440 # at start of cruise at 15,000'

Climb to 15,000 207 TAS 24 min 83 miles  
 114,440  
 2,390 fuel for climb  
 600 T.O. acceleration, and leaning of the climb  
 → 117,430 # T.O. Gr. Wt.

Start, taxi, etc. 117,430  
 310  
 → 117,740 # at engine start

|                         | TAS | ALT     | TIME                                    | FUEL   | GR WT   |
|-------------------------|-----|---------|---|--------|---------|
| ENG. START              | —   | —       | —                                       | —      | 117,740 |
| WARM-UP, TAXI, ETC      | —   | —       | —                                       | 310    | 117,430 |
| T.O., Acc, LEARNING     | —   | S.L.    | —                                       | 600    | 116,830 |
| CLIMB TO 15K            | 207 | CLIMB   | 83 <sup>024</sup>                       | 2,390  | 114,440 |
| CR TO "A"               | 268 | 15,000' | 927 <sup>3:28</sup><br><sub>3:46</sub>  | 9,700  | 104,740 |
| CLIMB TO 37K            | 216 | CLIMB   | 76 <sup>121</sup>                       | 1,920  | 102,820 |
| CRUISE TO "B"           | 276 | 27,000' | 27 <sup>106</sup>                       | 326    | 102,494 |
| CRUISE TO "D"           | 276 | 27,000' | 370 <sup>1:20</sup><br><sub>1:34</sub>  | 3,270  | 99,224  |
| DESCEND TO DZ           | 290 | DESCENT | 125 <sup>1:26</sup><br><sub>1:41</sub>  | 1,190  | 98,034  |
| LOITER                  | 279 | 15,000' | — <sup>1:30</sup>                       | 1,410  | 96,634  |
| CLIMB TO 27K            | 216 | CLIMB   | 61 <sup>1:17</sup>                      | 1,620  | 95,014  |
| CRUISE TO "D"           | 283 | 27,000' | 64 <sup>1:20</sup>                      | 774    | 94,240  |
| CRUISE TO "B"           | 283 | 27,000' | 370 <sup>1:19</sup><br><sub>1:31</sub>  | 3,190  | 91,050  |
| DESCEND TO "A"          | 294 | DESCENT | 103 <sup>1:21</sup><br><sub>1:35</sub>  | 966    | 90,086  |
| CRUISE at 15K           | 281 | 15,000' | 1010 <sup>2:35</sup><br><sub>3:59</sub> | 10,100 | 79,986  |
| HOLD @ 8K               | —   | —       | — <sup>1:30</sup>                       | 2,940  | 77,046  |
| CARGO <sup>5,000#</sup> | —   | —       | —                                       | —      | 75,046  |
| BASIC WT                | —   | —       | —                                       | —      | 75,046  |
|                         |     |         | 3216                                    |        |         |